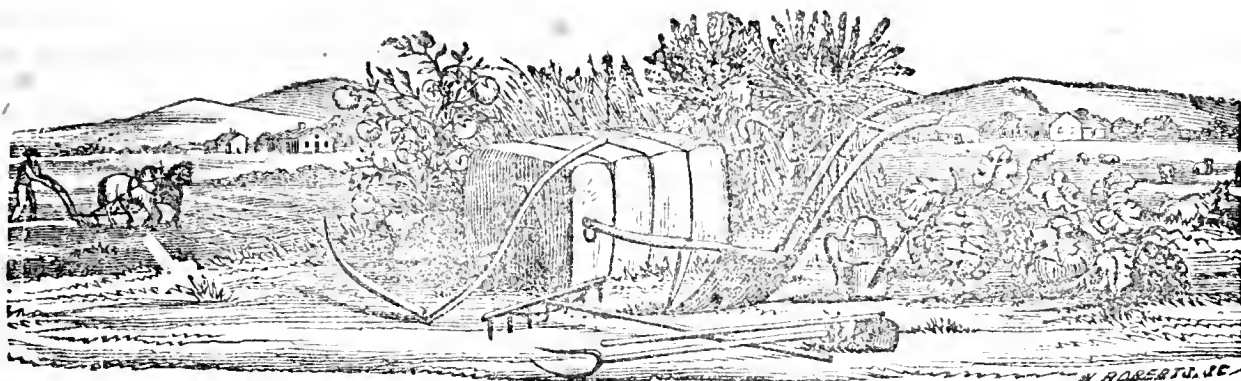


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# THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

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**GEORGE SEABORN,**

Editor and Proprietor.

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## Is our National Agriculture Deteriorating?

The Hon. Mr. Morrill, of Vermont, delivered some remarks the other day in Congress, upon a proposition to endow with the public lands, Agricultural Colleges in the several States. Without expressing any opinion in regard to the proposition, we cannot refrain from introducing some of his views which demonstrate a declining ratio of increase in agricultural development, and a condition of things very far from gratifying in regard to the improvement and exhaustion of soils among us. Of the decline in Northern agriculture we have furnished evidence on previous occasions in the pages of the Review. Mr. Morrill says:

The prosperity and happiness of a large and populous nation depend—

1. Upon the division of the land into small parcels.
2. Upon the education of the proprietors of the soil.

Our agriculturists, as a whole, instead of seeking a higher cultivation, are extending

their boundaries; and their education, on the contrary, is limited to the metes and bounds of their forefathers.

If it be true that the common mode of cultivating the soil in all parts of our country is so defective as to make the soil poorer year by year, it is a most deplorable fact, and a fact of national concern. If we are steadily impairing the natural productiveness of the soil, it is a national waste, compensated only by private robbery. What are the facts?

In New England, the pasture-fed stock is not on the increase, and sheep-husbandry is gradually growing of less importance, excepting, perhaps, in Vermont and New Hampshire. The wheat crop, once abundant, is now inconsiderable. The following table will exhibit something of the depreciation of the crops in ten years.

	Wheat—bushels.	
	1840.	1850.
Connecticut.....	87,000	41,000
Massachusetts.....	157,922	31,211
Rhode Island.....	3,098	49
New Hampshire.....	422,124	185,658
Maine.....	848,166	296,259
Vermont.....	485,800	535,955
	2,014,111	1,090,132

	Potatoes—bushels	
	1840.	1850.
Connecticut.....	3,414,238	2,689,805
Massachusetts.....	5,385,652	3,385,383
Rhode Island.....	911,873	651,029
New Hampshire.....	6,206,606	4,304,919
Maine.....	10,392,280	3,436,040
Vermont.....	8,869,751	4,951,014
	35,180,500	19,418,191

In many of the Southern States the decreasing production is equally marked.

	Wheat. bushels in 1840. In 1850.	
Tennessee.....	4,569,692	1,619,386
Kentucky.....	4,803,152	2,142,822
Georgia.....	4,801,830	1,088,534
Alabama.....	838,052	294,044
	12,012,726	5,144,796

These facts, after all proper allowances for errors and a short crop, establish, conclusively, that in all parts of our country important elements in the soil have been exhausted; and its fertility, in spite of all improvements is steadily sinking. The number of acres of land in use in the State of New York, in 1825, was 7,160,867; in 1855, the number had increased to 26,758,182 acres; but the number of sheep had decreased so that there were nearly three hundred thousand less than there were thirty years ago; and within a period of five years the decrease has been nearly 50 per cent., while the decrease in the number of horses, cows, and swine, is above fifteen per cent.—In 1845 the product of wheat was 13,391,779 bushels. It has steadily declined since, until the product of the past year did not exceed 6,000,000 bushels. The average yield of corn per acre in 1844 was 24.75 bushels; but in 1854 it was only 21.02 bushels.

The planting lands of Southern States have also greatly deteriorated, and some new fertilizer, beyond rotation of crops is anxiously sought. The average crop of wheat in Virginia, Tennessee and North Carolina for 1850, was only seven bushels per acre. In Alabama and Georgia but five bushels per acre. And even the largest of any State of the Union, that of Massachusetts, was but sixteen bushels per acre; and this, with the leanest soil, proves her agricultural science far in advance of her sister States. While the crop of cotton in the new lands of Texas and Arkansas was seven hundred to seven hundred and fifty pounds per acre, it was but three hundred and twenty pounds per acre in the older cultivated fields of South Carolina.

In a Southern journal I find the following statement:

"An Alabama planter says that cotton has destroyed more than earthquakes or volcanic eruptions. Witness the red hills of Georgia and South Carolina, which have produced cotton till the last dying gasp of the soil forbade any further attempt at cultivation; and the land, turned out to nature, reminds the traveler, as he views the dilapidated condition of the country, of the ruins of ancient Greece."

In Virginia, the crop of tobacco in 1850 was less than that of 1840, by over eighteen million pounds. No crop has proved more destructive to the fertility of the soil than the tobacco crop, and this staple commodity, unless a cheap and effective remedy can be found, must be either banished or it will banish the cultivators. In this State, where tobacco, corn and wheat have been continued for a century, many districts are no longer cultivated. Liebig says that "from every acre of this land, there were removed in the space of one hundred years, twelve hundred pounds of alkalies, in leaves, grain and straw." In a letter of General Washington, dated August 6th, 1786, to a friend (Arthur Young) in England, he writes:

"The system of agriculture, if the epithet system can be applied to it, which is in use in this part of the United States, is as unproduct-

ive to the practitioners as it is ruinous to the landholders."

Writing to the same person, at a subsequent date, (Dec. 5, 1791,) he says:

"The English farmer must entertain a contemptible opinion of our husbandry, or a horrid idea of our land, when he is to be informed that no more than eight or ten bushels of wheat is the yield of an acre."

Since these words have been written, little has been done to elevate the character of Virginia farming, and Mount Vernon itself, losing the eye of its master, has lapsed into the general degeneracy. While the yield of wheat has increased in England to thirty bushels per acre, it has sunk to seven in Virginia. The opinion of the "English farmer" may be imagined.

In an address of the late Hon. A. Stevenson, in 1850, to the Agricultural Society of Albemarle, in Virginia, he said:

"It can hardly be necessary to attempt to impress upon you the depressed and wretched condition of the farming interests throughout the State at large, with the exception of a few portions of it, which constitute honorable and praiseworthy exceptions."

Even in Ohio the wheat crop is already less remunerative than formerly, and fields long cultivated are given up to pasturage. In Indiana, Kentucky and Illinois, where so large an amount of grain is sold and carried off, instead of being fed out to stock, they are selling their lands by the bushel in the shape of wheat and corn, and that for a price utterly ruinous. Commerce, founded upon such agricultural economy as this, must come to an end, although the folly will continue to be avenged on posterity even to the third and fourth generation.

In the agricultural survey of Mississippi, recently published, Mr. Harper, speaking of the system pursued in the State, says:

"This agriculture has hitherto been a very exhausting one. Mississippi is a new State; it dates its existence only from the year 1818; and notwithstanding all its fertility, a large part of the land is already exhausted; the State is full of old deserted fields."

A recent address issued by the agricultural convention of South Carolina, declares:

"Our stock of hogs, horses, mules and cattle are diminishing in size and decreasing in number, and our purses are being strained for the last cent to supply their places from the Northwestern States."

In the late message of the Governor of Georgia, he eloquently descants upon the "educational wants" of his State, and among many other facts, he notices "the exhaustion of the soil under a system, of agriculture that glories in excluding the application of scientific principles."

My time will not permit a greater accumulation of evidence on this point, although I have a cloud of witnesses in reserve, nor is pointing out the nakedness of the land an agreeable duty. The leading fact, however, of a widespread deterioration of the soil, stands out too boldly to be denied. The great irreversible law of American agriculture appears in the constant and increasing diminution of agricultural pro-

ducts, without any advance in prices. It follows, just in proportion that capital is disappearing, and that labor receives a diminishing reward. Our country is growing debilitated, and we propagate the consumptive disease with all the energy of private enterprise and public patronage.

There is little doubt but that three-fourths of the arable land of our whole country is more or less subjected to this process of exhaustion. It has been estimated by Dr. Lee, of Georgia, that the annual income of the soil of not less than one hundred millions of acres of land in the United States is diminishing at the rate of ten cents an acre. This would amount to \$10,000,000, and involve the loss of a capital of \$166,666,666 annually. A sum greater than all our national and State taxation!

Men waste hundreds of acres of land on the theory that it is inexhaustible, whose entire wealth might not purchase the raw material—the magnesia, lime, soda, potash, phosphorous, sulphur, carbon, nitrogen, &c.—necessary to make a single acre possessing primitive fertility. Thus the accumulated store of ages passes away in a single generation.

And this waste of soil is not the only thing wasted. For want of the knowledge and skill which the institutions aimed at can alone impart, Colonel Wilder, a gentleman of well earned fame, estimates the annual loss of the single State of Massachusetts, in the one product of her cereal grains, at \$2,000,000. Another gentleman, in the same State, of great experience in the line of stock, dairy, &c., reports the loss from the same ignorance and unskillfulness in these interests, at \$15,000,000 for that State alone. The loss of New York, upon her four hundred and forty-seven thousand and fourteen horses, (and Ohio, by the census of 1850, had more) through the universal incompetency in the veterinary art, has been reckoned at not less than \$2,000,000.

[DeBow's Review.]

BY REQUEST.

From the Unionville Journal.

Report

*Of the Committee on Religious Culture of Slaves, submitted to the Union District Agricultural Society.*

The Committee to whom was referred the question of the influence of the religious instruction of Slaves upon Agriculture;—beg leave to report:—

Having had the subject under as careful advisement as their limited time and other pressing engagements would allow; they are of opinion that the religious and moral culture of the Slave population has direct reference to the success of Agriculture in this country.—This conclusion they have reached, mainly by the following reasons and reflections:

1. Agriculture is a pursuit, not of Barbarism; but of civilized man, and the more refined the cultivation, the more successful the Agriculture of the country.

The view of the subject is sustained by the history of civilized life, contrasted with the Barbarism that sustains life by the chase, marauding, and cannibalism.

2. The christian element is fundamental in our civilization—we take this upon general admission; it is regarded axiomatic—and as such, in the same proportion we would enhance civilization, we must regard and obey the dictates of religion.

3. Civilization is itself aggressive, it is so in its nature, and those who live in the midst of its institutions, however uncivilized, will more or less imitate it—and if they do not know what is its basis, they must of necessity have incorrect notions, and a spurious civilization.

4. Civilized society recognizes the element of benevolence, and cannot get on without it. Hence, the poor are cared for, the infirm and disabled find Asylums at the Public expense—and it is no mean mark of civilized life that Schools for the deaf and dumb, and also for the blind are provided; as well as support and Education for the poor and the destitute.—These consumers in society repay mainly, in that they induce the cultivation of the charitable element, the pleasure it affords us to see them relieved, and their improvement as citizens of the country, and members of the social compact—while we abide in the consciousness we have discharged a high moral obligation. The slaves among us are *our* poor, they are placed in our hands for protection and discipline; and they are likewise placed in our hands as property, so that after we have paid the expense of food, clothing, medical attention, &c., we are entitled to the remainder as a right for our superintendence and responsibility.

5. It is the opinion expressed by many gentlemen in the Southern States, who have the largest experience in the case, and are best entitled to know, that religious culture adds greatly in the government and discipline of the slave population—and the strongest evidence they can give is the employment of suitable persons as religious instructors, at considerable cost every year. We could call your attention to a great number of persons, who have by industry and economy made large fortunes, who are paying fifty and a hundred dollars a year for the religious instruction of their slaves. The historical fact has gained great notoriety, that Mr. Withers, of Georgetown, often having tried it for many years, provided by will, that some three hundred dollars annually, should accrue from his estate for the perpetuation of this service. The testimony of owners and overseers, so far as we have been able to learn, is constantly in favor of the opinion that the investment is not as great as the actual dividend, in the way of improvement.

Some of the facts given are a stronger sense upon the part of the negroes to obey, and its reasonableness: a feeling of fear to offend against the obligations of religion, and especially a fear of being churched and expelled for disobedience.

6. Again, one of the safeguards of character is self-respect, which must, when properly regulated, come of intelligence, and of necessity such intelligence as recognises and feels moral obligation. He that has intelligence without this, lacks the best restraint we can command, and is liable to use his knowledge for the worst purposes. One of the difficulties in the way of the management of slaves is, they have but little character to lose, and but little self-respect to sustain them; and hence a temptation to vice is only a welcome invitation—if the hope of escaping flagellation can be reasonably entertained. How long it will take, through how many generations of gradual improvement, before such will be the result, viz.: a strong feeling of self-respect properly balanced and regulated, we are not able to say—but so far as our experience and observations have gone, we must think the work will be exceedingly slow and tedious.

7. We do not hesitate to say there is a moral obligation upon holders to give their slaves the opportunity of religious instruction and discipline. Holding as we do that the christian scriptures contain the best and only system of morals in the world, teaching them to our children, and employing ministers of religion to teach them to ourselves, and community-at-large, we cannot for a moment doubt that our slaves too should have such advantages as their condition and circumstances will allow.

8. It is likewise felt and believed to be a great christian duty, and to one aspect of this, we would call special attention. Christians are regarded and really are the guardians of the religion of our civilization; and as they believe with good warrant, it is their duty to teach religion to all people, a failure to co-operate with them, or even to join issue against them in their high mission, would make the impression upon the slaves that they were not cared for in morals; and this won't take away the powerful appeal, that there is a wish for their good in this life, and also in the life to come. While it would deprive us of the benefit of the influence of the churches, in support of the institution both at home and abroad.

9. As to whether a slave would perform more manual labor as the result of religious instruction, we do not undertake to say—unless the ground should be taken that the simple fact of cleansing their persons, and the attire of which they are remarkably fond, would have a tendency to improve their health, and give them a vigor of constitution that would better prepare them for Agricultural pursuits—and if the principles of the christian religion could be fully carried out, and enforced upon them, there would be doubtless a considerable saving in relief from such loathsome disease as spring legitimately from filth and from vice.

10. We do not feel called upon to express an opinion in regard to the best method of religious instruction, but believe it is just and proper to say that there are some evils already in existence, under the name not to say sanction or religious instruction that should be avoided.

1. The practice of promiscuously assembling

of the slaves for religious purposes, when the same is conducted by a slave, is doubtless pernicious and evil; and cannot be too carefully guarded.

2. The slave is not capable of giving such instruction as is best calculated to do good to the moral sentiments, and the feelings:—As a general rule the inferior intellection of his race, together with a want of education, makes it useless to employ him as an instructor in that department which involves the very foundations of character.

3. It is known that the African is eminently endowed with the religious feeling, and is more easily moved than one of the same type of Caucasian blood. But the religious feeling alone is an unreliable warrant to society, for its peace and safety.

All enthusiasm, and fanaticism in religion come out of this. The religious feeling is necessary as a proper opening to the authoritative instruction and discipline of religion—through this door all religion is carried to the reason and judgment and conscience. This will explain why so many persons, who have had strong feeling in religion, have led irregular, and in some cases disagreeable lives.

4. The slave preacher has no authority of church discipline or government, and having but little of the power of truth, his ministry is substantially powerless, and in some cases an evil.

5. There is a tendency when a large assemblage of slaves come together without the guards and restraints of their owners, to fall into a state of vitiated feeling, and receive improper impressions; as useless in religion, as they are dangerous to the peace of society.—We are of opinion, that slaves should never meet to worship only in the same congregation with their owners; or in presence of more than one reliable citizen.

11. It appears impracticable in the present state of things in Union District, to prosecute the work of religious instruction very extensively upon the missionary plan; as it is done in the low country. We can see no better way than to provide, that the slaves attend the different religious churches, and that arrangements should be made for their accommodation and instruction where they attend. It does not appear out of place to say here, that there is a defect in many portions of our District in this particular.

We are defective in ministerial agency, and have need that there should be at least as many more, that the work properly belonging to the sacred office may be promptly and efficiently done. There is also a want of houses of worship in several places in the district, that the slaves, and even their owners may have the means and facilities of religious instruction and worship.

It is firmly believed that attention to this, would greatly improve the moral tone, both of the white and colored population. It cannot be too carefully noted, that to the extent of our obligation to provide for the slaves' sound morals and religion, the obligation goes to guard them against every thing of an opposite char-

actor. The slave should be guarded against vitiated free persons, white or colored, with most assiduous care—a white freeman can, if he has the disposition, do vast damage by tempering with the slave population.

The vigilance of the district cannot be too wakeful at this post of duty.

The slave should be guarded likewise against profanity. It is believed, that on all plantations, where the negroes are allowed to swear with impunity, the tendency is to weaken their sense of obedience, and strengthen that insolence of disposition to which, as a race, they are remarkably liable. The sobriety of the negro cannot be too well guarded—he must be regarded an enemy, who, in any way furnishes the means of intoxication.

Alcohol is unsafe in the hands of the most intelligent, and ruinous, utterly ruinous, in the hands of our slaves.

12. We believe that on all suitable occasions, the *Bible* should be read to the slaves; for the wholesome truths of Revelation cannot do harm, and are most likely to produce the most wholesome results. We have known several gentlemen who had their negroes called ever Sabbath morning, and from the piazza a chapter was read to them slowly, and then they were sent away to reflect upon the reading—we have been assured that the effects were excellent.

13. In conclusion, we are fully impressed with the importance of the family relation among the slave population. Their morals and religion are probably more defective at this point than any other. It would no doubt be an excellent arrangement to the cause that the marriage ceremony be carefully celebrated among them—it should be done by a white man—and whenever a separation takes place, they should be made responsible; and where one is sold into separation, unless in a case of misfortune upon the part of the owner, it should be in consequence of misconduct, for which he or she is responsible. To keep families together and to keep them on the same plantation as nearly as possible, is doubtless a wholesome regulation.

More might be said, but we believe we have substantially presented the question.

All of which is respectfully submitted.

W. A. McSWAIN, Chairman.

The interesting article below, on the subject of Agricultural Chemistry, we take from the "*Sumter Watchman*." On laying it before our readers, we intended to preface it with some remarks on this, as we think, a very important subject to every tiller of the soil, but on reading the very pertinent remarks of the able editors of the "*Watchman*," on introducing it to their readers, we are so much pleased with them, that we prefer adopting them as better than any thing we could say. We are pleased to see that the subject is to be continued by one so able to handle it.

We commence the publication, in our present issue of some articles upon the subject of Agricultural Chemistry, written in a conversational

style. These articles are the product of an able, practical and experienced mind—one that has scrutinized closely our agricultural condition and prospects, and who feels an abiding interest in the great work of arousing the latent energies of our planters, to the adoption of some principle or system, the deduction of scientific research, experience, truth and discovery, whereby our impoverished and deserted fields may be again rendered fructuous, and made to blossom and smile with the elements of our strength and prosperity. That this may and can be done—profitably and practically done—the scientific world accustomed to investigations of this particular branch, entertains no doubt. The theory and principle have been clearly and satisfactorily demonstrated; and it but remains to bring the agricultural mind of the country to bear upon the subject—to catch the inspiration, so to speak—to gather up the valuable offerings, which science has spread at our feet, and apply them to the great work to which they legitimately belong.

It is, unfortunately, too true, that there exists in the agricultural world, and particularly at the South a deplorable want of knowledge in regard to the analysis, and of course in regard to the constituent compounds of the soil cultivated—in fact in regard to any and all the helps afforded by scientific investigation, without which the planter, in every new attempt to render his fields more fruitful, but gropes his way in darkness and uncertainty. A want of appreciation of the importance of the subject seems everywhere to exist. Generation after generation has been content to follow in the footsteps of the one preceding, without regard to the lights which have been reflected by science, until we find ourselves well nigh hopelessly impoverished. How can the planter reasonably hope for success, in a greater degree with an imperfect knowledge of his vocation, than the merchant or mechanic, in a like situation? An intimate and perfect knowledge of any calling or pursuit is indispensable to its successful and profitable prosecution.

It is, then, all important that the planter should not only be acquainted with the character and constituents of the soil he cultivates, but that he should know what necessary ingredients, the food of the plants grown, are absent, in order that they be supplied; as also the nature and composition of the fertilizers applied. Agricultural Chemistry teaches this, in common with a vast deal of great value.

The articles to which we alluded to in the outset, and to which we simply designed to attract attention, are written in conversational style with the view of enlisting interest in their subject matter. We trust they will receive that careful consideration their character and merits demand, and contribute something toward rousing our planters to their true policy and interest.—EDS. WATCHMAN.

## Conversation on Agricultural Chemistry.

BY J. S. RICHARDSON.

A. I propose, gentlemen, that in this our first conversation we feel ourselves at liberty, without regard to any arrangement of topics, to talk about any matter in connection with our subject, which may interest or serve to bring in view the importance of the study of Agricultural Chemistry.

The period has, I think, arrived, in the history of our agriculture when it comes necessary for our planters to call into requisition other means of renovating the soil, than those they have been accustomed to employ. Heretofore, by occasionally clearing and bringing into cultivation portions of the wood-land, they have been enabled to make remunerating crops from a part of their cultivated land without manure, and thus keep their old lands in heart by applying to them all the manure supplied by the stable and cattle-pen. Now, however, the woodland they have left, is needed for other purposes, while the manure provided from such sources, is quite insufficient to maintain the fertility of all their land, and the consequence is a gradual decline in their productive quality.

B. And I am inclined to believe there is less difficulty in providing the materials proper for renewing in our lands those fertilizing ingredients which are removed from them year after year by the cultivated crops, than there is in making a profitable use of them. Nature has placed such materials largely within our reach, but as you intimate, we have been independent of other means of fertilizing than such as we have provided from time immemorial, without any unusual pains, and have therefore cared little for any such knowledge as would enable us to make a profitable use of other fertilizing substances. Such knowledge is now important to us, and if I mistake not, by the study of Agricultural Chemistry, we acquire a knowledge of the nature properties, and profitable use of all fertilizing substances.

A. You have in few words stated about all that is acquired by it. All plants consist of certain elementary ingredients which they derive from the natural soil, or manure artificially provided, and from the atmosphere, and Agricultural Chemistry teaches us what are the elementary substances which enter into the composition of plants, soils and manures, and the action of these upon one another. It farther teaches us in what proportion they exist in different species of plants; in what proportion therefore they should exist in the soil where a particular species is to be cultivated—and the proportion in which it is necessary to supply these elements in manure, in order that the plant may not only have every ingredient of its food, but be able to appropriate each in the required proportion.

C. I would infer from the fact that different plants of the same species, though growing upon soils of a very different character, produce grain or other fruit, of the same flavor and nutritious properties—that such plants must appropriate from the soil the elements

which enter into its grain in precisely the same proportion.

A. Chemical analysis supports your inference, and shews farther, that the same elementary substances enter into the whole structure of plants of the same species (including their fruit) in the same proportion—in whatever soils they grow; or, in other words, that such plants appropriate the constituents of their food in the same proportion, wherever they grow. In order to ascertain what these elements are, and the proportion in which they are required by any particular plant, it is necessary to analyze it and find out what elements compose it, and their proportion in the plant.

B. And then by analyzing the soil and ascertaining its different ingredients and the proportion in which they exist, we determine whether or not that the plant may be successfully cultivated upon it.

A. Yes, and if not what it may be necessary to supply, in order to make up the deficiency. All the elements required by a plant, may however exist in a soil, yet in a form which renders them wholly unavailable; that is, they may exist in an insoluble form, or in combination with other substances from which the plant cannot separate them, in which case, it is necessary to provide some substances which by its chemical action may change their form and render them available—or else, to effect the same purpose by mechanical means—for example, as the silica in a soil can only be taken up by the roots of plants when it is dissolved, (and so when all the other elements of their food except the grasses) it is sometimes requisite to supply some alkali (potash or soda) which by combining with it renders it soluble. In other cases, some requisite ingredient may be present, but in combination with some solid substance, which must be pulverized in order to expose it to the roots of the plants.

C. As by analyzing a plant we are enabled to determine I presume not only what character of soil is adapted to it, but what kind of manure it is proper to apply.

A. Certainly; soil is the form in which nature provides food for plants; manure is the form in which we artificially provide it. Without a knowledge of the composition of plants and of the elements of any new substance it may be proposed to employ as manure, we would, in any experiment we might make, be acting in the dark. In the use of these manures with which long experience has made us perfectly acquainted, there can be no hazard; but in the application of those which are altogether new, and which we are now under the necessity of using, nothing less than the knowledge referred to, can guide us with certainty to successful results.

B. And hence it is, I presume, that many good planters have sustained injury in the use of such, while others less judicious happening to employ them differently have done so to advantage.

C. And others again knowing the elements which compose the cultivated plant, or, in other words, the elements it needs for its food, and

knowing too, the composition of the substance employed as manure, never fail to realize successful results.

A. Yes; what you remark is illustrated by the various effects, good, bad and indifferent which follow the use of guano by different planters. This substance is in itself a very imperfect manure, as may be seen by comparing its different ingredients with the various elements which enter into the composition of the food of any one of our cultivated plants; or, in other words with those which compose the plant itself. Peruvian Guano, (the kind preferred by our planters) appears by the analysis of Dr. Ure, to consist of little else of value as manure, than the phosphates of ammonia, lime and magnesia. These three compounds consist in all of six compound substances which enter into manure, viz.—Phosphorus, Oxygen, Hydrogen, Nitrogen, Lime and Magnesia; Indian corn (the whole plant, including its grain) is found by analysis to consist of Phosphorus, Oxygen, Hydrogen, Nitrogen, Lime, Magnesia, Carbon, Silica, Potash, Soda, Sulphur, Chlorine, Iron and Manganese; fourteen elements. By comparing with these the constituents of Guano, it appears that the latter provides the plant but very partially with the ingredients of which its proper manure or food consists. The same elementary substances enter into the composition of nearly all the plants we cultivate.

B. How then does it happen if all the substances you have mentioned are required by plants, that many planters have made such profitable use of this manure, which contains only a part of them.

A. If the soil itself did not contain those other substances which guano fails to supply, the application of the latter alone would be profitless; but, so long as all these exist in sufficient quantity in the soil, its productiveness is much enhanced by it. The experience of many planters proves this upon its first introduction into Germany as manure. Many of the German farmers used it as such, without combining it with any other material, and continued so to use it for a series of years, after which it was found that all the guano that could be provided could not produce a single crop. The large supply of the phosphates of lime ammonia, &c., which enter very largely into the composition of grain, had stimulated the cultivated plant to extract from the soil all the other required elements in due proportion, and as these were never replaced in the soil the supply of them became exhausted, while only those returned to it in the form of guano, to a certain extent remained. It then became necessary in order to render the impoverished lands again fertile, to restore to them those substances (sulphur, carbon, potash, soda, &c.) which had been annually abstracted without ever being returned to the soil.

C. I observe that many of our planters are committing the error of the German farmers; the result, no doubt, will be similar. It is said that no little advantage is gained by combining this manure with coal or plaster; both of

these however in combination with guano, would, it seems be far from making it a perfect manure, or supplying all that plants require.

A. Independently of the bad effect of using it for a number of years successively without introducing into the soil other fertilizing substances, its beneficial effect is at any time uncertain when used alone. If the season be only moderately wet, it is likely that much advantage will be gained; but a few heavy rains, have the effect of dissolving all its ammonia, which, being very volatile, rapidly passes into the atmosphere, and is lost to the plant. Charcoal is the best known absorbent of ammonia, and prevents this loss by absorbing and retaining it until the plant extracts it. Plaster, or sulphate of lime still more perfectly prevents this loss by fixing the ammonia; that is, the sulphuric acid of the plaster having a stronger affinity for ammonia than it has for lime, leaves the latter and uniting with the ammonia converts it into a sulphate of ammonia, which is a fixed salt and instead of escaping into the atmosphere, remains in the soil. Guano is however, most judiciously and profitably used as manure, in combination with rotted vegetable matter. This being of the nature of coal is a good absorbent of its ammonia, and at the same time supplies to the plant all the mineral ingredients of its food. The two together constitute a very perfect fertilizer, restoring to the land all that is taken away by the cultivated crops.

C. The same result which follows the continued use of guano, in exclusion of other manure, may be expected, I presume, to follow the exclusive use of any other partial manure—as lime or salt—or a compound of both.

A. Surely; indeed the like effect would follow the like use of any compound which does not contain all the mineral ingredients required by plants—that is to say, all those which nature provides in the soil—an exception is to be made of course, of those elements of which there is always an inexhaustible supply—as silica, and in nearly all soils, iron and manganese. The soil must in the course of time be exhausted of all such as are never returned to it in the form of manure, and barrenness ensue; for if one of the constituents of a plant—or, one of the constituents of its food be absent, the presence of all the rest is unavailing; the plant cannot be fully developed without it.

B. Is it not true, however, that some plants do not require the presence of certain substances, in the soil, which are yet indispensable to others?

A. Certainly; a soil may be quite barren speaking with reference to the culture of particular plants, yet in the highest degree productive of others of a different character; and it may be that nothing more is needed to adapt such a soil in the highest degree to the growth of such plants as we desire to cultivate upon it, than the introduction of a single needed element of their food. It is therefore very important to the planter to know the composition of his soil. Knowing that, and knowing also,

what are the constituent elements of the various plants he wishes to rear upon it and the proportion in which these are required, he is at no loss to determine what is needed to supply any deficiency. Agricultural Chemistry by teaching us the composition of plants—and of soil or manure, which feeds them, and the properties of those substances which enter into their composition, enables us to use those substances as manure with good effect.

C. And without such knowledge we are apt to do so with bad effect. Many of our planters have injured their crops, and others their land by the injudicious use of lime; do you not think, if they were better Agricultural Chemists, they would use that munure far more extensively and profitably than they do?

(CONTINUED NEXT MONTH.)

The following extract from a Report of the Seasons, &c., in the Unionville Journal, we transfer to our columns, as an interesting record to which our readers who preserve their numbers, may hereafter refer, to settle disputes which not unfrequently take place regarding the time of past remarkable seasons, &c.

#### Report

#### *Of the Seasons, Past and Present—Meteorological Influences upon Health and Vegetation.*

As a philosophical truth, the same causes will produce the same effects. Hence, as the great causes in the machinery of nature are the same, we might expect but little variety in the seasons. In the main it is so. Cold and heat, seed time and harvest visit the earth in regular succession. We know when to sow and when to guard against the inclemency of winter. But as all the causes which influence the seasons are not known; as they are perhaps never precisely the same; a considerable variety obtains in the seasons themselves. One year may differ in many of its aspects from that which follows it in circumstances which are obvious and distinct. Nature marks every object with a distinct individuality; she abhors a sameness in her productions as she is said to abhor a vacuum. As no man ever saw two plants or two animals precisely alike, so no man ever saw two days, two summers, two winters or two years precisely similar.

We will notice some of the variations in the degrees of heat and cold, the amount of rain and other Phenomena which have given variety to the aspects of different years for a time past.

We notice first, years remarkable for exemption from rain. As a regular supply of rain is closely connected with the Agricultural interests of the country, a season of drought is regarded a signal calamity. The year 1785 was a year of general drought in all this region of country. Some others less marked occurred between that and the year 1824. The latter was fatal in many parts of the country in earing-time, though the early part of the season was favorable. A fair crop was raised in the year 1830, though scarcely a shower fell from

the 1st of August till Christmas. No wet spell or general hard rain fell from February, 1838, till December, 1838. Both years, however, afforded abundant crops. That of the latter year was above average. 1845 is an epoch in the Agricultural history of our country, for its exemption from rain while crops were growing. But little rain had fallen in 1844; enough, however, to produce an abundant crop. 1845 began with a dry earth. Aridity was a distinguishing feature of its atmosphere till the middle of August. In addition to its dryness and parching sunshine, scorching winds swept over the country; answering the double purpose of dispersing the few drops upon the earth, and apparently bringing a deeper blight upon vegetation and excited hopes. Star-gazers foretold the time when fertilizing showers would set in, but the time passed without the promised boon. It was difficult to determine which wore the most woe-begone aspect, the wilted crops or the countenances of their owners.—The atmosphere of that season was remarkably elastic, sound travelled to great distances, and disease was almost unheard of or doubtless despair would have crushed many hearts.

Of years remarkable for an excess of rain, 1840 perhaps stands at the head of the list in the present century. January and February were wet, snow frequent, frosts severe. March, upon the whole pleasant. April wet and cool. May afforded the greatest general freshet which had occurred in the Atlantic States for a period of 45 years, with abundant showers besides the great rain. Rain abundant till the end of September. 1850 abounded in rain. On the 24th day of August, a storm occurred, which produced the first of the three annual August freshets in our streams, likely to be long remembered by those whose interests lay in immediate proximity with rivers.

For a number of years past rain has been abundant, but not always falling in accordance with our wishes. The famous showers of July and September, 1856, may be mentioned as illustration of this. Many remember the magnificent displays in the way of thunder storms which occurred in these parts in those months. The lightning flashes were incessant, while the roar of thunder was like the crash of falling mountains. And then the rain! That man was in luck for once, whose fields were carpeted with grass. Sad faces grew out crops on creek bottoms. The famous institution, the Spartanburg and Union Railroad, ought to erect a monument to perpetuate the memory of its disasters by flood and field. The falling of snow is generally to be expected in our climate at some time in Fall, Winter or Spring. Snow-storms are, however, far from being uniform in their occurrence. Several years sometimes elapse with a very small amount of snow. While occasionally we have a Lapland winter. In 1800, snow fell to the depth of 18 inches in many parts of this State, and places contiguous. In January and February of 1831, snow lay upon the ground for four successive weeks. It was abundant in 1855 and 1856, particularly in the month of March. In March, 1843, some 4 or 5 snow-storms occurred. The 1st day of

April, was in its aspects similar to mid-winter. A considerable storm of snow occurred on the 15th day of April, 1849, vegetation was forward for the season. Wheat, corn, cotton and flower-gardens smiled through their mantle of white, soon, however, to be nipped by the frosts succeeding.

On the 2d day of January, 1851, snow fell to the depth of from 8 to 18 inches as reported in different localities in the up country of South Carolina. Its greatest depth was probably in this vicinity. In January, 1856, a series of snow-storms commenced and continued in such a way, that snow lay upon the ground for nearly seven successive weeks. The snow of that season was remarkable for its dryness and powers of penetration. In January, 1857, the coldest snow-storm remembered in this region took place. The frost in March and April following, frequent and severe. February 12th, 1858, snowing at daylight, rain followed and froze on the trees to such an extent that "the oldest inhabitant" confessed he never saw the like before. By mid-night the wailing of the winds in the forests, and the crashing of falling timber was terrific. The 13th presented the spectacles of seas of glass. Every tree was varnished with a coat of ice often half an inch thick. Spikes hung from every bow, and gleamed in day-light like polished steel. The sturdy sons of the forest groaned under the pressure, and thousands were prostrated by the weight. Leisurely on the morning of the 14th, the trees began to throw off their superfluous ornaments. Through the whole day the patter and jingle of falling ice was kept up. Gradually the bent branches resume their natural position. The 15th showed mutilated forests and orchards as if the genius of desolation had swept over the land. This storm extended over a long belt of country, and its foot prints as a lasting memorial of its power. On the 26th day of April, rain, sleet and snow fell in various parts of this State, followed by killing frosts.

The most intense cold probably in the present century in this region, occurred on "The cold Saturday," Feb. 8th, 1835. In some places south of the 34 deg of latitude, the Mercury was 8 deg. below Zero. This was the climax reached in a series of cold winters commencing with January, 1831. The coldest weather since was in January, 1857. "In 1816 the severe cold of a few days was long remembered." The thickest ice ever seen by the writer, in this latitude, was formed at that period. He remembers hearing people say at that time, that "the weather had not been as cold since the cold Friday." In what year "the cold Friday" occurred, your deponent saith not; but it was once a famous day, and served the double purpose of an epoch and a standard of comparison.

The winters including January of the years 1831 and 1832 were steadily cold for an unusually long period. The frosts were magnificent, and ice abundant. In November, 1833, the renowned Meteoric shower occurred on a night which abounded with frost, and was followed

by much of the same material through the winter.

In January, 1827, there were several days of intensely cold weather when ice formed to such an extent as to surprise the natives. This was the more remarkable from its occurrence in a series of mild winters. As early as 1824 the vigor of the climate appeared to have relaxed. The winter including January, 1825, was very mild. The same is true of 1816 and 1827. The winter including January, 1823, was the warmest of the present century. It exhibited few of the properties appropriate to winter. The coldest weather was in November. A killing frost, however, followed in the first of April.

A season of intensely cold or hot weather doubtless trying to the constitution, as is evinced by the number of sudden deaths, particularly among the aged and infirm. It has not fallen under our observation that seasons of excessive rain or drought are necessarily productive of disease. But the exposure of the body to a humid atmosphere, has often a debilitating influence. The effects of a season of excessive rain may be felt upon the health of the country for many years after it has occurred, by the change produced upon the face of the country. Streams are often so changed as to kill the luxuriant growth of vegetation in their vallies, and become for a long time fountains of Miasmatic influence. The atmosphere contains an element which feeds and sustains animal life, and another which performs like functions for vegetable life. These are essential for these ends. So that the atmosphere which debilitates and exhausts the powers of life in animals, may push vegetation with unwonted energy in all its developments. But independent of these original elements, other gases may be evolved by local causes which exert an influence both upon animal and vegetable life. This may be illustrated by seasons in which fevers seize the human system with unwonted malignity, vegetation at such times shoots forward as if in mockery of the debility experienced by men. But what the connection of such a state of things may have with a wet season or a dry season; a cold winter or a warm winter, there is great difficulty in determining. The difficulty is increased by the fact, that while two seasons may be quite similar in their more obvious outlines, there may yet be a manifest difference. An influence lying almost wholly out of the range of human observation, may be exerting a power to counteract influences which are obvious. For instance, a season may be attended by circumstances well adapted to prostrate the system and bring on disease; but all these may be counteracted by the prevalence of thunder storms or some other cause much less manifest. A like influence secret or manifest may secure health in localities exposed to predisposing causes of disease. When diseases arise, men begin to search for the cause, and feel under special necessity of being able to assign reasons. In the investigation the imagination is apt to be active, and cause enough to kill the whole race is discovered in accounting for one case of bilious fever.

## Minerals of Pickens District.

In this number we intended giving some extracts from Prof. LIEBER's second report, but finding an article in the "Mountaineer," directly from the field, on the Minerals of Pickens District, we conclude to transfer all that we consider important to our columns. We hope Prof. L. will continue to make such communications occasionally to the papers of the Districts in which he is engaged, if not to our own. Agricultural papers have, we believe, been generally preferred for such reports in other States.

## CAMP NEAR GREENVILLE C. H.

Before making any allusion to the useful minerals, permit me hastily to present the general succession of rock strata in these upper Districts, and to illustrate their position by examples. Commencing with the uppermost, we have

1. *Blue Limestone*, occurring in York and Spartanburg.
2. *Itacolumite*, or elastic sand stone, embracing also a lower limestone bed, in Spartanburg, York, Union and Pickens.
3. *Clay Slate*. A narrow bed of this underlies the former in York. Clay slate also occurs abundantly in Chesterfield, and extends thence onwards to Richland.
4. *Talcose Slate*, the real gold country of our part of the world, in York, Lancaster, Kershaw, and again in Edgefield and Abbeville.
5. *Mica Slate*, common in York, Spartanburg, Greenville and Pickens.
6. *Hornblende Slate*. A thin stratum of this intervenes between the gneiss and mica slate of Greenville and Pickens.
7. *Gneiss* in Chester, Union, Lancaster, Spartanburg, Greenville, Pickens, &c.

Besides these, eruptive rocks are abundant in some districts, but it would carry us too far to notice them closely at present. Pickens is peculiarly devoid of them.

Of the rocks above alluded to, Pickens exhibits only the gneiss, hornblende schist, mica slate and the itacolumite, or, more properly speaking, a portion of the itacolumite series (embracing a talcose stratum, a limestone bed and the enveloping sand stone). The rest are omitted.

Of the rocks, the *limestone* is of course capable of attracting the utmost attention. The Pickens limestone is identical with the lower limestone bed in Spartanburg—the one which is there, known as the marble bed, and which has been slightly worked at the Otterson Quarry and near Limestone Springs, not furnishing as good a lime as that derived from the upper bed, opened in the immediate vicinity, the former has been much neglected of late, although some attempts have been made to employ it as a building material. A block was sent on to the Washington National Monument as a representative of South Carolina.

In Pickens this bed is considerable purer than in Spartanburg, a matter of great importance in the absence of the other bed. Still, the lime produced from it will be somewhat tinged with yellow, owing to the presence of

a few crystals of iron pyrites. At one point I found this limestone of a pure white. The locality alluded to is at the Horse Shoe Bend of the B. R. R. At another locality, where the rock occurs in great abundance, (on the waters of Chauga,) Mr. Maxwell and some other gentlemen are preparing to furnish lime for the masonry on the railroad. Other out-crops of the rock are traceable down Brasstown Creek, from whence the rock enters Georgia, where it is also worked. For agricultural purposes this limestone will be of great benefit, as the singular deficiency of lime in the soils of Pickens and northern Greenville is one of their most peculiar characteristics. A small portion of lime is infused where the hornblende schists appear, but so rare is their occurrence, or, rather, so insignificant is their bulk, that their supply of this fertilizer is very inconsiderable. The value of the limestone is thus greatly heightened.

The *itacolumite*, by whose beds the limestone stratum is enveloped, is itself the real mother rock of the *diamond* in every country where this precious mineral occurs, and indeed, in Georgia and North Carolina, it has already been discovered in connection with this very belt. As yet none have been found in our State, but so small a body as even a valuable diamond can escape detection so easily that the absence of an actual discovery is no proof whatever of the absence of the mineral. It was long after the probability of the existence of the diamond in the Ural had been pointed out by Humbolt and others, that a diamond was actually found. Since then the production there has been regular.

After alluding to some fine *soapstone* occurrences, one of which is within a few miles of Fort Hill, while another is seen on Mr. Parsons's place, near Saubrity P. O., I would call your attention to the presence of *felspar* in workable quantities on the farm of Mr. Laban Mauldin, near Pickensville.

Felspar is a mineral employed in the manufacture of porcelain, and at the establishment of Kaolin, in Edgefield, the company have hitherto been forced to procure their supply from New England. On a visit to their works last winter my attention had been urged to the careful search for extensive occurrences of this mineral, and it was therefore with great pleasure that I was enabled to acquaint them with this discovery.

At the locality in question, search had been made for gold—a little blue quartz occurring with the felspar. No gold was found, and the felspar had been thrown aside as "worthless rock." In the pit opened it occupies almost the entire space of a vein five feet in diameter, and some of the single crystals are upwards of a foot in length. At the next agricultural fair samples of this very useful mineral substance will be exhibited. The supply appears to be almost exhaustless, for numerous other unexplored veins show themselves on this and the adjoining lands.

In reference to valuable or useful *metals*, Pickens is not as well supplied as we might at first sight anticipate. The most conspicuous min-

eral or metallic belt of our State crosses it farther down the country, entering from the rich mining regions of Charlotte, Concord and Union, North Carolina, and extending thence across the State to Edgefield and Abbeville, being, however, interrupted by the denuding influences of the Saluda and its tributaries.—Nevertheless, there are some important occurrences of useful metals in Pickens District.—Gold is extremely often met with in branch deposits, though no very productive auriferous veins occur. Some of these deposits have been worked a long time since, as at the “Keowee place,” and at Mr. Ravenel’s, for instance. Only one of such gravel beds is now operated upon. This is situated in Cheohee valley, and a Mr. Kuhlmann is employing a considerable force at this spot. While working his deposit he is also actively engaged in exploring some veins close adjoining, containing *argentiferous galena*. The quality of these veins is exceedingly promising, and although the size is too small to prove remunerative at the depth hitherto attained, I would remind you that this, like excessive youth, is a fault which is likely to diminish daily. Besides, to furnish you with a practical instance of such improvement in our State, I would direct your attention to the Mary Copper Mine, in York, where at the surface the vein never exceeded a foot, and at a depth of thirty-five or forty feet had increased to four and five feet in width. Other instances of a similar nature you will find in my last report.

These veins belong to a type which contains gold above, copper below, and sometimes lead between. Here the auriferous portion has been removed by aqueous action, and has furnished the gold of the deposit. The copper region has not yet been reached.

Every one interested in the development of our mineral resources will join me in cordially wishing success to these mining explorations, and to all similar ones in the State.

I have not mentioned above a rich but very little gold vein on Mr. Lay’s place in Cheohee, which might be rendered somewhat productive for a time, in reference to gold, and will afterwards probably lead to copper, and previously, possibly to lead.

Some small deposits might also be profitably worked for a confined period, gravel deposits being *eo ipso finite*. Such auriferous beds are found on Mr. Parson’s place, near Salubrity, and at Mr. Lay’s, in Cheohee, and along numerous watercourses elsewhere in the District. But I will not detain you with other enumerations, as I fear I have already trespassed too far upon your and the reader’s attention.

Very respectfully,

OSCAR M. LIEBER,  
State Geologist.

#### About Wheat.

“Wheat sowed on moist land should be buried deeper than on dry land to protect the roots from being *hove out* by the frost.”

So teaches a contemporary. But will this doctrine bear the light of investigation? Is it in

accordance with the practical teachings of reason and common observation? We think not. The reverse is true. If wheat is to be sowed on dry land it should be covered deeper than on wet land, at least so deep as to obtain sufficient moisture to insure germination, and it will bear a much deeper covering of earth, and flourish in it, than if sown on wet land, because with a greater depth of covering on dry land neither *heat* nor *air* are excluded from the seed and roots, as would be the case if covered an equal depth on wet land. If seeds are covered to an undue depth on moist or even dry land the young plants can never get a healthy start and will not grow until an entire new set of roots are formed at just that depth below the surface through which the requisite degree of heat and air is afforded. The subject of *Terra culture*, which has been the theme of a certain *ignoramus*, for years claims only what every intelligent cultivator ought to know—that nature prefers a certain depth for the covering of the seeds and roots of all trees and plants, and any deviation from the proper depth does violence to the plant or tree, which cannot be expected to recover and flourish, until nature, by a slow and tedious process repairs the injury, by furnishing an entire new series of roots, at just that depth below the surface of the soil that will admit of the proper degree of the requisites we have mentioned.

Wheat, sown upon a too moist soil, whether the seed be buried deep or shallow, will throw its roots nearer the surface than when sown upon land more dry, and is the more liable to be “hove out” by the frost, not only because its roots are compelled to seek their place nearer the surface, but because of the greater expansion of the soil, owing to the undue degree of water that it contains. The only remedy for such land is thorough draining.

Our text reminds us of similar advice given in the same paper some time since, that peas succeed best when planted ten or twelve inches deep. Agricultural editors should be *practical cultivators*.—*Valley Farmer*.

We have heretofore published the cause of Mad Itch in cattle more than once, probably, but as we require “line upon line and precept upon precept” to keep us right, it may not be amiss to republish the following, which we find in the “Valley Farmer.”

#### Mad Itch.

Having suffered a heavy loss from that terrible disease, the Mad Itch, which you desire to be informed about, I have concluded, for fear that no other person may give you that information, to give you my experience. Several years ago, I fed my hogs with green corn in my clover field, where I had a lot of cattle running. After I had been feeding them some weeks, my cattle were taken with what I afterwards found out to be the mad itch. The first symptoms are a scratching and rubbing of their heads, ears and neck; they will run them until they become perfectly raw. In the meantime they suffer a great deal, which they show by their running and bellowing in a piteous

manner, after which death ensues. Before they die, their heads, neck, body and tongues swell, their eyes become blood-shot, and they suffer a great deal. Death is certain to ensue if the disease is taken, for I tried various remedies, such as a pint of castor oil with one, a pint of lard with another, and a table-spoon of calomel with another; and all to no effect, as I lost nine head in one week. The hogs chew the corn stalks and get all moisture out of it, and it lodges in the manifold, and becomes hard and dry, so that when you take it out and break it, you can press no moisture out of it at all. The manifold has two entrances, about three or four inches apart, and both on one side, so that medicine can pass through without interfering with this hard, dry substance—that is killing them. I cut open a good many of my cattle, and was convinced of the cause and the effects; since which I have had further proof. A neighbor laughed at me for saying why they were killed, for he said, he had fed his cattle and hogs together, &c., and had never lost any. But he has changed his views, for since that he has lost six or eight head of cattle just as I did. I have known them to have it in the dead of winter, by half starved hogs eating the dry fodder, and dropping it, the cattle afterwards eating it and were killed.

AGRICOLA.

Arrow Rock, Dec. 13, 1857.

For the Farmer and Planter

#### A Rat-proof Corn Crib--New Style.

MR. EDITOR:—The time is now at hand when those who shall have to gather to their garner, the result of a seasons' toil, whether it be of meager proportions, or of greatest exuberance, should think of harvesting every grain of the great staff of life, solely for the benefit of man. Now, my good friend, have you ever thought of how much of the farmer's labor goes to the support of *that*, worse than useless gang of rats, infesting the corn cribs of the country? Any estimate of the amount which they annually destroy would have to be founded upon mere speculation; but the most reasonable assumption, if reduced to figures, showing the loss in dollars and cents, would, nevertheless, startle that class of economists, who have never a dollar to give to the support of an agricultural paper, however, much more it might be worth to them in return of fruitful knowledge, which to them would be as "bread cast upon the waters," to be gathered after many seasons. For my own part, needy as I am of the *shiners*, I can afford, occasionally, to give a dollar or two for the support of agricultural works, in anticipation of the benefit I may derive from them; but I have not a grain of corn to give the most useless of the animal creation—rats. Nor do I believe that there is a particle

of excuse for any one else doing so, excepting such as may not have been pursuing the arts of husbandry sufficiently long to have enabled them to have put up permanent improvements, among which should never be omitted a good corn crib, or cribs, sufficiently large and numerous enough to receive and preserve every grain of corn and wheat too, that may be made on the place. Now, of the various plans to effect this purpose, I can give you one—a perfect fortress against an army of rats—surpassing any model of the so-called "*rat-proof corn crib*" kind—at least within my knowledge.

The house may be framed and set on rocks, blocks, or other material, just as any other house. The floor and door should be tight, so as not to allow the ingress of even a mouse, when the shutter is closed; and may be of any desired height from the ground, but a little elevated is preferable for the floor, and the door may have portable steps, if too high to enter without them, so as to be removed whenever necessary to drive a wagon close to the door, for loading or unloading. The wall should be weather-boarded closely about nine feet high—say to one foot above the top of the door.—Then put a plank 12 inches wide all around the building, with one edge fastened to the wall, the other projecting outward—the outer edge being one or two inches lower than the inner one, so as to pass off freely any rain water that may chance to fall on it. This board is to prevent rats and mice from passing up the wall; but for the purpose of making it more difficult, and utterly impossible for them to pass from the lower to the upper side of this shelving board, let another, three inches wide, be nailed to the outer edge of it, with its projection downward. Now, if you have the idea correctly, here attempted to be conveyed, you have the secret and plan of a rat-proof corn crib; for above this shelving board you may have the walling as open as you please. I have mine latticed all around, two feet above it, the gable ends also, the lathes of which being  $1\frac{1}{2} \times \frac{1}{2}$  inch, and then nailed 2 inches apart, admit an abundance of light and air, even when the door is closed. To prevent rain from blowing in, let the roof project two feet over the ends, and one and a half foot over the sides of the building. Put a good tight floor on the joists, and then you will have a place on which to spread your wheat, and get it thoroughly dried before sending it to mill, without the otherwise usual trouble of sunning; and when pea time comes, it is a very good place to put the peas picked

for seed, which will come off again in time for wheat, and vice versa.

Of course farmers should build to suit their necessities, and arrange the interior to suit their own notions of convenience. I was about to describe the interior arrangements of my own crib, but I forbear, lest my *notions* should become a subject of criticism. I will, however, venture a suggestion as to the impropriety of setting a crib in a lot, which is to be annually covered with straw and other combustible material, as is always the case in a horse and stock lot, wherein much manure is to be made for the use of the farm. In a dry season, a single spark of fire may ignite the straw, and the destructive element may communicate to all the buildings in the lot, regardless of every effort that can be made to save them. The grain crop of a farm is too valuable to be exposed to such hazards. Let it, therefore, always be housed with a view to its safety. It is exercising but common prudence to put it beyond the reach of this devouring element, so far as it is possible to do so, and the farm must be *cramped*, indeed, that does not afford sufficient space for the corn house to be outside of the horse lot, and yet sufficiently contiguous thereto for all essential purposes.

If you should think these suggestions worthy a place in your columns, let them go before the public; but if not, dispose of them as you please, and I will try to send you something better next time. Yours, truly,

P. Q.

Leesville, S. C., August 23, 1858.

For the Farmer and Planter.

#### The Seasons and Crops--Effects of the Atlantic Cable on the Planter's Interest.

MY DEAR MAJOR:—This is the first day of autumn, and the bright hopes of summer are cut short by the coming in of an autumn clothed in the sere and yellow leaf.

On the 1st of August we never saw a finer prospect for a abundant harvest. In some sections the corn had suffered, but the late rains had wrought a wonderful improvement—the cotton crop was incomparable. We have never seen as much fruit on the stalk made in July. We have not had rain enough to bring up a turnip since the 12th of July, and this has been pretty general throughout the country, we should judge, from the newspapers. There are strips of country which have been blessed by showers, but the drought has been, we take it, pretty general through the back country.—

The Barometer, during July, stood 15 days at 29 1-10; 10 days at 29 2-10; 3 days at 29; 2 days at 28 8-10. The Thermometer ranged from 70 to 74 at sunrise during the month.—The wind blew from S. W. 18 days; W. 5 days; N. and N. E. 8 days. Rain during July 2 1-10 inches total. The only thing which kept vegetation from severely suffering, was the heavy dews brought by the S. W. winds from the gulf; for notwithstanding the small amount of rain falling, corn and cotton kept a good color, and grew luxuriantly enough for the season.

During the month of August the winds have been very dry, and veering about to all points of the compass—W., N. W., N., N. E., S. E. and S. W., very little of the latter; often changing their direction several times a day. The dews have been very light, the nights very often cloudy and cool, and changes sudden from hot to cool, and clear to cloudy. The Barometer has stood at 29 1-10, and 29 2-10 nearly the whole month. On the 15th it fell to 29, and we had a little rain—the only rain since 12th July, but not enough to bring up turnips.—Cotton has not made a boll since 1st August. Stalks counted 1st August, 48 bolls; 7th August, 53 bolls; 14th August, 48 bolls; 21st Aug. 46 bolls; and no blooms coming now but what fall off. The stalk is shedding its leaves, and the cotton opening like it does after a first frost. It is too late now to expect any thing more from cotton. The corn crop, of course, has not suffered to the same extent, but it will fall far below an average crop, and the cotton crop cannot exceed half an average crop.

From what we can glean from the newspaper correspondents, it is no better in many other portions of the State. Still we now and then meet with newspaper editorials, blowing about the fine prospects of the crops, the first bale of new cotton, and all such stuff.

Only a few days ago we read an editorial in the Carolinian—a paper published at the Capital—the centre of nearly all the Railroads of the State, rejoicing over the prospects of a glorious harvest. Of all things, the reports about the production of cotton should be reliable—there is no end to the mischief which misstatements may bring upon the planter. All this blowing, whether it turn out true or false, reacts upon him. These first blooms, first bolls and first bales, are trumpeted over the land—every now and then embellished, and by the time the news reaches Liverpool, it amounts to a crop of 3,500,000 bales at least, and the next news we have is "owing to the advices

by the late steamer from America. Cotton has declined."

Now, that a telegraphic communication between the old and new world, between the consumer and producer, has been effected, we may consider the interests of the planter committed to the brokers and speculators of New York and Liverpool. They will reap most of the profits of cotton planting, for they understand how to keep their own secrets and play into each other's hands. While the planters are such wise-acres that they will never keep their own secrets, or make use of any concerted action for their own protection. They will not even patronize a paper devoted exclusively to their own interests, by their money or their brains.

BROOMSEDGE.

Big Branch, September 1st, 1858.

For the Farmer and Planter.

#### Formation of Dew--'Aiken' vs. 'Pendleton.'

MR. EDITOR:—Your correspondent, "Pendleton," in the April number of the Farmer and Planter, has given us such an excellent article, so full of good advice, and so clearly on the right track, that I feel reluctant to dissent from any of his views. But his theory of the formation of dew is not in accordance with the deductions of science and the universally received opinion of scientific men—and I am sure from the tone and temper of his essay, and the avowed distrust with which he announces his theory, that he will very cheerfully receive a correction of the error. The paragraph to which I take exception, is the following:

"The cause of dew is said to be the escape, or rather the radiation of heat from the earth, which, coming in contact with the cold and vapor of the atmosphere, is, by means of the unequal temperature, condensed in the form of dew, and settles on plants and the surface of the earth. This is another admirable provision of nature for supplying moisture to plants. The sun is the great source of light, heat and moisture—all of which are necessary to the support of vegetable life. The heat that is absorbed by the earth during the day, is at night returned into the surrounding space, and there meeting with the aqueous vapor suspended in the atmosphere, precipitates it into visible moisture. It is a law of nature when two bodies of unequal temperature are brought in contact, each will part with the qualities until an equilibrium is produced. The cold of the atmosphere, and the heat of the earth mutually act on and neutralize each other

and condensation is the result. A palpable and visible illustration of this principle is to be seen in the sudden condensation of drops of water on the outside of a tumbler, when cold water is poured in, on a hot summer's day. Here the atmosphere supplies the heat, and the water the cold; whereas in the formation of dew, the earth supplies the heat, and the atmosphere the cold, but the result is the same in both."

The parts in italics contain the erroneous views. It is true that radiation of heat is the cause of dew, but not by the process given above.

The atmosphere at all times contains more or less of aqueous vapor, held in solution by heat, and rendered invisible. Generally during the hottest weather there is most vapor in the atmosphere—simply because there were heat to take up the moisture. It has then a greater capacity for retaining vapor in an invisible state. Therefore the amount of vapor is greater in summer than in winter—in hot, than in cold weather. Whenever the heat, from any cause is abstracted, the vapor, deprived of its solvent, returns to the state of fluid. If a tumbler or other earthen vessel be filled with very cold water in the summer, and allowed to remain for a while, the outside gradually becomes moistened, and finally drops of water will begin to trickle down the sides. The reason is this: That portion of the atmosphere which is in immediate contact with the vessel, loses a portion of its heat to the water; the atmospheric vapor which was held, dissolved, and suspended by the portion of heat thus abstracted, being deprived of its solvent, returns to the fluid state, and is deposited on the outside of the vessel.

It is precisely in this way that dew is formed. The glass of cold water in the above experiment, represents the earth on a clear night. How the earth becomes cold, is explained by the laws of radiating heat.

It is a law of nature that all bodies are at all times radiating, or passing off their heat in straight lines. This property is entirely distinct from that of reflection. Reflected heat is not retained, but passes off immediately from the surface at an angle always equal to the angle of incidence. Radiated heat is continually escaping from every portion of the surface of bodies in straight lines or radii. As all bodies possess this property, the effect is, a constant tendency to form an equilibrium of temperature. During the day, the earth, receiving more heat from the sun than is lost by radiation, becomes warmer—the surrounding atmosphere receives a large portion of this heat, and

is thus enabled to take up more vapor. It has its capacity for holding invisible vapor increased. But as soon as the sun disappears, radiation continuing, the heat is lost in open space, *if there are no clouds above*. Objects on the surface of the earth thus exposed to free radiation, become cooler than the surrounding atmosphere, which we see is charged with its maximum of vapor from the absorption of heat during the day, and the vapor contained in that portion of the atmosphere in contact with these cooler bodies, thus deprived of its solvent, is deposited in the form of dew.

But if there are clouds above, they receive the radiated heat from the earth, an interchange is established, and the earth cools but little.—It is for this reason there is no dew on cloudy nights.

It has been ascertained by experiment that different bodies possess the property of radiating heat in unequal degrees: that the leaves of living plants, wood and metallic bodies, whose surfaces are roughened, are good radiators, whereas earth, stones, brick and bright polished metals are bad radiators. This fact accounts for the formation of dew upon the former, when the latter are found dry in the morning.

I have thus, Mr. Editor, endeavored to correct an error in what I consider, otherwise, a very excellent essay. This theory of multiplying the superficial areas of the land we cultivate by deep plowing, and thus making the area below the surface as available as that on the surface, or in other words, increasing the productiveness in proportion to the depth cultivated, is good husbandry. The limitation will only be found when that depth under the surface is reached, when the labor of tilling will be greater than the increased productiveness, when the loss will be greater than the gain.—How very few now ever go near to that point.

AIKEN.

For the Farmer and Planter.

#### Prove Your Faith by Your Works.

MY DEAR MAJOR:—You have heard, I dare say, often enough, the old story of the Frenchman, who, after listening to a crowd assembled around a poor fellow in distress, each one saying how sorry he was for him, cut short their crocodile whinings by drawing out of his purse ten dollars, and saying, "I am beggar, sorry for him so much."

Dr. Calhoun has come out like an honest man, and proved his faith in the salvation of the Farmer and Planter, by his works. I

back the Dr. Send a copy of your paper forthwith to Col. W. R. R——, Winnsboro, beginning with 1st. last January, and I will stand responsible. Nor will I stop at this. If I don't send you five new subscribers before January, I will send you five dollars, and take it out in papers. There, now. If we can get readers, we can get along—for those who read will (many of them) write, and there are very few of our plainest farmers who cannot now and then make a valuable hint or suggestion. "Variety is the spice of life." You cannot have too much of it, and every man who sees his work in the paper, feels he is doing something, and his interest is increased in the paper's success, as well as the cause of improvement. Then let us go it. LE FRANCOIS:

For the Farmer and Planter:

#### Put Your Foot Upon a Weed.

MR. EDITOR:—I would like to know if the weed war is ended yet. If it is not, I would be glad if you would carry it on until every weed is entirely demolished—General Rag Weed in particular, with all the rest of his field officers. I was surprised to hear Broomsedge come out as he has in favor of giving place to rag weed. I thought he had reigned King of the field so long that he would have been loath to give it up. As to the two evils, I would rather take the last. Being subject to his power so long, I would rather broomsedge would remain and I know mules and oxen would also. It is something strange that I have been taught all my life that weeds were a pest to man, and a poison to the land and crops; yet men of experience, in order for argument sake, come out and say that weeds are both a fertilizer and renovator to land and crops, and would try to make us believe that they are a blessing sent to us as food for cattle. Well, I'll admit that a drowning man will catch at a straw, and a hungry cow will bite at a weed. The analogy is the same. If a man could swim along with his head out of the water, he never would lay hold of a straw; and if a cow could get plenty of crab grass, she never would lap her tongue around a weed. I believe weeds have done and will do greater injury to crops than we are aware of. I will here give my opinion and observations upon weeds. I believe weeds are the grand cause of so much complaint of cut worms and bad stands of corn. I remember two years ago I planted a field in corn, part of which had been in oats, part in wheat. The cultivation I will speak of hereafter. The

part that was in oats, was thickly covered with rag weeds, and when this is the case I always find it a difficult matter to get a good stand of corn, as others do, I presume. That same Spring I met one of my neighbors, and in a conversation about the stand of corn, he said he had been replanting, and found a very bad stand—that by noon that day he found forty-odd bed or bud worms. I asked him what sort of land it was. He said it had been in oats, and was literally covered with rag weed. Is all of your corn in that condition? I asked. He said he had planted some cotton land which was clear of weeds, and man could not wish for a better stand. Yes, and I'll venture to say you will find this the case nine times out of ten; and not only so in the Spring, but you will find that corn planted in weedy land, will be very much worn eaten at the points or ends of the ears.

It's useless to talk to me about weeds being sent as a blessing, for if I could be made believe that anything was a curse which has been made, I would as soon take weeds to be that, as any thing else. I would like if some of my weed friends would try the experiment with me. If they will haul dry rag weeds, I will haul rocks and throw them over a sand bar, and see which of us would have the richest turnip patch first. I would sooner chance the rocks, as they would keep it compact and from washing. Yet they say that weeds keep the land loose and mellow. My land is always too loose. I care not how much crab grass grows on my land in the fall, nor how much it is trod on, if done when the ground is dry. It keeps the surface from being exposed to washing rains—it makes it a little harder to plow in the Spring, but I like it the better for that. I am always sure to get a good stand of corn on land of this sort. First plow it with a half shovel, then with the Sulsoil Plow, if you please. Now as to the cultivation of land to get rid of weeds, first plant in corn, then in wheat, then cotton. In this way you can get clear of all kind of weeds. I would sooner fallow cotton with wheat, but I cannot get it out soon enough to sow wheat as soon as it should be.

Before I close, permit me to give my plan of planting cotton: When I was a little boy I heard an old lady say she always had her cotton planted East and West, but did not state her reasons for it. Some years ago I thought I would try it, and I think I have found out four or five reasons why I consider it a good way to

plant. The first is, in running the rows east and West—the sun is always shining in the middle of the row, that is, between the rows, warming the young plant. The second is, when the plant is large, the shadow of itself is upon the plant all day, only a little while at noon—keeping the roots cool. The third is, the dew dries so much sooner than when the rows are run North and South. The fourth is, the cold winds in the fall are either from the Southwest or North-east; and with the rows run in this way, the hands picking out cotton can always stand with their backs to the wind.—The fifth is, I believe it matures sooner, and yields more. If any person has a better plan, please give it, and I'll knock under.

Mr. Editor, you can use your pleasure with these lines. I know General Weed is too far advanced to be captured, and conquered this season. But I hope you will be recruiting and enlisting on till the first of April, when you will be able to give them a broadside.

Yours, truly, J. D. W.

For the Farmer and Planter.

Crops and Seasons.

MR. EDITOR:—This has been a most remarkable season—one disaster after another. Wet at first until the seventh of February, the long to be remembered sleet. Wet again until the first of May, then the slaying frosts, killing fruit, corn, and injuring wheat very much; then showers with hail. Then the rust upon the wheat, then something I have never seen before—rust upon oats. 21st of June, thundergust, with wind, hail and washing rain.—Rain, more or less, then for three weeks, every day. Now very warm and dry, 5th of August.\* Also, the cattle disease, a very strange thing. Rust upon nearly all vegetation. Therefore, taking every thing into consideration, I will state the crops thus: Wheat at a little over half a crop; oats at nothing; corn, on our washed lands, cannot be more than half; cotton, unless it rains soon, and is a favorable fall, might be said ditto. I speak for my own neighborhood. One thing we have reason to be thankful for, is, the general health of the people has been good. J. D. W.

Cedar Falls, S. C., Aug. 3d, 1858.

\*And we will add distressingly dry and hot up to 3d Sept.—Ed.

GRAPE CULTURE.—It is said that in six years, at the present rate of increase, the grape crop on the banks of the Hudson will produce wine enough to supply the city of New York. —*Mass. Spy.*



## The Farmer and Planter.

PENDLETON, S. C.

Vol. IX, No. 10, : : : : October, 1858.

### Our Prospects.

This is the 10th month, October, and we have but *two* more numbers to publish of volume 9. Some of the friends of the Farmer and Planter will look under the above head with anxiety to know what are its future prospects, and to such we may as well at once say they are not by any means flattering. If we had enough of such friends as a *few* who have put their shoulders to the wheel, as may be seen in some of our recent numbers, as well as in the present one, all would be well; but *they are too few in number*, and although a band of spartans, it cannot reasonably be expected of them to accomplish what a thousand *might do*, without the loss of a man, and in all probability, a single almighty dollar. Can it be possible that there are a *thousand* of our subscribers who can not procure *one* or more new names for volume 10? It surely *can't* be so. But be it so or not, so stands the case up to this date. Besides the many that have been sent us within the last three months—and to whom the whole or a part of the preceding numbers of the current volume have been sent—besides these new subscribers, who are fully counterbalanced by withdrawals, principally from other States, *we have just 14 names and volumes subscribed for up to Sept. 23!* This, you will agree, friends, is by no means a flattering prospect—it is any thing but flattering—but we will not yet say “Give up the ship.” You have our promise to steer it if you will man it—perform your part, and with the blessings of Heaven, *we will ours*—

### The State Fair.

Our readers will find in our present issue the advertisement of the Executive Committee of the State Agricultural Society of South Carolina, for its third Annual Exhibition on the 9th, 10th, 11th and 12th of November next. We have every reason to believe that this will be a most brilliant affair. The last exhibition, under remarkably embarrassing times, was eminently successful. The exhibitors and visitors, we believe, were as well pleased as possible under circumstances. Where every body expects every body to look at his wares through his spectacles, it would be too much to expect every body to be pleased. Our own experience speaks loudly for the benefit

socially, as well as agriculturally, of such an Institution. There can be no greater treat than this meeting together of those bound together by identical interests, all striving for a common end—agricultural improvements and domestic happiness—for one is so intimately connected with the other, that social reforms must follow agricultural reforms and social ease and refinement, agricultural success. The Executive Committee have issued a most captivating Premium List, which has appeared in a former number of our Journal, and will also be found in this. It embraces almost every thing within the range of Agriculture, Horticulture, Arboriculture, Household Economy, and the work of woman's cunning fingers. The tasteful conceits embodied in brilliant silver, which are annually exhibited by the Society, cannot fail to prove attractive to the lovers of the precious metal. By the way, we can say to our fair “Josie Jonquil,” that Broomsedge says, if she can play her fingers as well as she does her pen, she might take a cup if she would send a specimen of her handiwork to the next exhibition. We trust that there will be a general turn out—we can vouch for the mountains, but our salt water friends have hitherto given us rather a cold shoulder.

### The Pendleton Farmers' Society.

Look for the Premium List on our advertising sheet, and govern yourselves accordingly. Bring in your fine stock, and other premium articles.

### Seasons and Crops.

After a long and almost fatal drought, rains have generally fallen in the up country, from the 1st to the 10th of September. Too late for corn or any thing else but peas and potatoes. Turnips have been sown by many who had not before put a seed in the ground, and re sown by those who had previously sown and lost their labor and seed. Never have the farmers and planters had better prospects of good crops at an advanced period of their growth, nor have they ever been more sadly disappointed in the harvest. First of wheat, then of oats, corn, cotton, peas and potatoes. Prospects of an abundant yield from all, at one time, were most flattering indeed, but the realization will fall very far short of our once sanguine expectations. Besides those received from our correspondents, we have accounts through our exchanges from almost every district in our State, and many sections of all the States South, and we may say that we have but seldom heard a more universal complaint of short crops; and yet calculations are already being made in certain quarters, of an overwhelming cotton crop of from three to four millions of bales, and from the early opening of cotton, and the number of bales that will be forced into market at an unusually early date, such calculations will, for a time, be relied on as correct; but the close of the market for the crop of 1858, will, if we are not greatly mistaken, reveal a very different state of facts. Those who sell early, before the panic of a four million crop shall seize the planters, and those who keep cool and sell at the close of the season, will, in all probability, realize the best prices. These are our speculations, and may be taken for what they are thought to be worth. It is, no doubt, believed by many planters, that they are going in future to realize better prices in proportion to the European market, than they ever have heretofore done.

in consequence of the operations of the Atlantic Cable. It may be so, but we believe directly to the reverse, and that we of the South have more cause of regret than is to rejoice at its success. On the subject we would refer to the remarks of "Broomsedge," who can see as deep into a millstone as can the man that picks it.

#### Acknowledgments.

We have received from the Rev. C. W. HOWARD, of Kingston, Ga., a copy of his address before the Cassville Female College, for which he will please accept our thanks. Mr. HOWARD also writes us that his proposed agricultural paper, the name of which is changed from the "Southern Homestead," which we have heretofore noticed, to "South Country-man," will make its appearance on the first of October, inst. We shall consider the "South Country-man" not as an intruder, but welcome it as an able help in our field of operations. Mr. HOWARD's name is familiar to many of our subscribers as the former Pastor of the Huguenot Church in Charleston. He is known to be a gentleman of no ordinary talents, and is we believe, much devoted to agricultural and kindred pursuits.

#### To Correspondents.

Some person, over the signature of "A Subscriber at 'Black Oak,' S. C.," sends us an account of the remarkable product of *two hundred and forty-one* bushels of corn from one acre of land, by SAM'L B. SCOTT, of Missouri, and thinks "It is due to candor, if not to honesty, to acknowledge the corn." Well, we admit we have heard some such report heretofore, but "candor" and "honesty" would not allow us to publish it, for the very good reason, *we had not the proof*. We did not see the report in the "Southern Cultivator," which "A Subscriber" refers to, nor can we now lay our hands upon it, and hence do not know by what authority the report was there published. Probably it was only an extract from some exchange of the "Cultivator," without being properly vouched for, and if so, we cannot "acknowledge the corn" over Dr. PARKER's head. If "A Subscriber" will send us his proper name, with the proof, however, we will, as the fellow said when he stole the knife, "Give it up like a gentleman." We should have published his communication if he had have sent with it his proper name. And we will here again say to our correspondents, that the proper name *must* come with the communication to insure its publication. If writers do not desire their names to go to the public, we will, of course, not give it, but it must be confided to us, ladies' communications excepted—we will take it on ourself to "circumscribe and keep them in due bounds."

#### Is our National Agriculture Deteriorating?

On this, to every farmer and planter in the United States, subject of paramount importance, we re-publish from DeBew's Review, some most startling facts,

if *facts* they be, and we doubt not they are such to the letter, and should teach us the very impressive lesson—that the system heretofore pursued of cutting down our once valuable forests, wearing out and fleeing to new lands to repeat the same destructive course, *must be abandoned*, and that an improving and preserving course must speedily take its place—otherwise we shall ere long be compelled to import our own bread-stuff, and how shall we import without money to buy with, or something to give in exchange? If we felt as much interest in the improvement and preservation of our worn out farms as we do in the preservation of the Government, the agricultural papers of the country would be better sustained than they are, and our road as a nation of friends and brothers would be much more smooth and pleasant than it now is.

#### Our Advertisements.

Winter will soon be on us, and it is high time to be looking out for suitable clothing for our negroes. We consequently call the attention of our readers to the advertisement of GEORGE SCHLEY, Esq., of Augusta, Ga. We have seen recently some samples of Mr. SCHLEY's goods, twills and plains, and consider them superior to any thing we have seen at the prices stated in his advertisement.

FRUITS, FLOWERS, &c.—See also Mr. P. J. BERKMANS & Co.'s advertisement of Fruits, Flowers and Shrubbery for the South, and never buy Northern fruit trees when you can procure them of superior quality for our climate, and on much better terms near home.

#### From G. D. Harmon—Desponding.

For the Farmer and Planter.

MAJ. SEABORN—*Dear Sir*:—Oh! how prone we poor mortals are to *forget* and neglect our duty to ourselves and our country. We sometimes make a good vow, not to live for ourselves only, but for our country—our fellow men. We sometimes feel like leaving the world better than we found it, and we determine to *do something* for some good cause. But these blessed feelings and aspirations wear away, time moves on, and we find ourselves "cumberers of the ground" still.

I was thinking of the proposition I made to your readers to sustain your paper, and I wondered how many whole-souled men were to be found within the range of your journal's circulation, who would "second the motion," and come up to the help of the *cause* against the mighty. I feel like there must be many. I feel like the friends of the cause for which you labor will surely stand by you in this last desperate effort to stand your ground against the *enemies of Southern agricultural improvement*.

Depend upon it, sir—I will send you my share of new subscribers. Yours, &c.,

G. D. HARMON.

Edward's Depot, Miss., Sept., 1858.

**Motions Seconded by G. D. Harmon.**

For the Farmer and Planter.

MAJ. GEO. SEABORN:—I am so far from you, and it takes my letters so long to reach you, that I can't communicate with you as I wish to do just now. I thought that anything started from here to you for publication, by the 5th of the month, would reach you in time for your next month's issue, but find that I was mistaken.

Your September number is worthy of all praise. "Me thinks" I can hear the shouts of victory ringing over the battle field. The Farmer and Planter lives—the enemy is vanquished. Oh! how glorious old fogysm would feel if the only paper in South Carolina, devoted to "B-o-o-k F-a-r-m-in'," should *sicken and die in the arms of its friends*.

I will "second the motion" of Dr. E. R. Calhoun, or friend "J. R. S.," either or both. At any rate I will send you \$5 by the 1st October, whether I get any new subscribers or not—I *will make new ones*.

I like the spirit of "W. B.A." too, and hope he may get you a *long list* of new names. I think we are all waking up, and if we will only *keep waked up*, your Farmer and Planter would not only live, i. e., *not starve to death*, but in less than twelve months it would number its subscribers by the *five thousand*. That's what it ought to do.

Thank "J. R. S." for his "Amens" to the motion to have an essay. Good night.

Yours, &c., G. D. HARMON.

Edwards, Miss., Sept. 6th, 1858.

REMARKS.—We regret that several of our friend's recent communications have not come to hand in time to appear as early as we, as well as himself, desired; but there is no certainty in our mails. The article above was written on the 6th, and we received it on its arrival at our office, on the 16th, by which time our paper is usually made up, though we are not quite so forward with our October number. All communications intended to appear *certainly* in the next month, should come to hand now by the 10th, as we are becoming more industrious than heretofore. This is creditable to our young publisher, and but one printer to assist him, press work included.

The communication which appears above this, came to hand by the same mail. It is dated Sept., 1858, day not given—was probably written before friend H. received the September number, which seems to have cheered his desponding spirits something above the zero point at which they stood before its receipt.

WORTH TRYING.—Mr. A H SNOW, of Brunswick, Maine, says that a few applications of castor oil will kill any kind of warts, on man or beast, without soreness.

**Not the first Good Experiment of Dr. Sparkman**

Below we take the liberty to publish a letter received from a highly respectable gentleman of one of the lower districts of our State, and the President, we think, of the Society alluded to. We doubt not there are hundreds of gentlemen in the State who, if the Farmer and Planter was introduced to them by their friends, would as cheerfully and readily embrace it as has the writer, whose name, we regret, we cannot give, as his letter was not intended for publication.—We take the occasion to thank him most sincerely for his gentlemanly and prompt movement in the matter.

MAJ. GEO. SEABORN—*Dear Sir*:—I have received 8 numbers of the "Farmer and Planter," sent to me by order of my friend Dr. Sparkman. Enclosed I beg leave to hand you \$1, in payment of my subscription for the current year.

I regret to perceive from a notice in one of the numbers, that the Farmer and Planter is not well sustained, and that there is some apprehension of a discontinuance of its publication at the end of the year. Such a state of things is much to be deplored. It seems, however, to be the fate of all agricultural publications in this State, to go by the board. I trust the Farmer and Planter may prove an exception. I subscribed to the "Southern Agriculturist" until it died out; and also to the "South Carolina Agriculturist" during its *one year's existence*. I inferred from the fate of these papers, that no similar periodical could live in our State. But as the "Farmer and Planter" has weathered it through nearly 9 years, I hope its future patronage may be such as to secure for it a *good living* the same number of years many times multiplied.

An Agricultural Society has been recently established in this District—not yet in full operation—and should your paper be continued, I will use some effort to have it circulated among our farmers.

For the Farmer and Planter.  
**Broomsedge at the Wheel.**

MY DEAR MAJOR:—I am glad to see my friend "J. R. S.," of Prince George Winyaw, so much in earnest. He comes out in the right spirit—ready to help. There is no use praying to Hercules; we must put our shoulder to the wheel. It would be a crying shame to allow the only paper, exclusively devoted to the planter's and farmers' interest, in the State, go down because there were not enough liberal men out of 30,000 agriculturists to sustain it.

Give the paper a list of paying subscribers

equal to 5,000—one-sixth of the agricultural population—and it will take care of itself, and fight sufficiently in our behalf—make it an independent press—not an annual begging concern; elect it for life, not for a year—and you will find writers and readers coming up to the ranks without dunning. I will back J. R. S., and I second him in the wish that our salt water friends will join us more heartily in the work.

BROOMSEDGE.

For the Farmer and Planter.

**Encouraging Remarks---The Crops---Gypsum on Cotton.**

**MAJ. SEABORN**—*Dear Sir*:—I have been a subscriber to your journal for ten or a dozen years, and must contribute my testimony to its usefulness in my neighborhood. For many years it was the only agricultural journal in the State, as it now is. With the formation of a State Agricultural Society, three or four years ago, there sprung up a rival to your valuable journal, which struggled for existence for about one year, and then expired. Having been a life member of the State Agricultural Society, I was much interested in its journal, and over its early death was a sincere mourner. My only comfort being the survival of the Farmer and Planter, the offspring of an enthusiastically affectionate parent. Maj., you are a modest man, but permit me to say that South Carolina owes you a heavy debt of gratitude. May she soon awake to her responsibility, and pay it with interest. Like the appearance of a welcome visitor, the advent of the Farmer and Planter is anticipated at the beginning of each month, with heartfelt pleasure—full, as it always is, of pleasure and instruction to the planters of this section.

In this section of the State, since the frost in April, we have had an unusually favorable season for cotton. The long staple cotton requiring a dry summer, has been peculiarly favored. The cotton has not opened as early as on some previous seasons, but has a fine crop of bolls, which, we believe, are safe from frost. Corn crops are unusually good in this section, in consequence of the reclamation of valuable swamp lands, long lying idle. Our low country is intersected by many very fertile swamps, which, we believe, are destined to prove a rich resource to it. Planters here have gone very energetically to work, and hope before long to have much of this rich soil in cultivation. The crops on those lands the present year, will range from twenty to thirty bushels per acre. We make much compost manure about here, the

resources being very great, in fact, inexhaustible, and the reclamation of our swamps will enable the planters to apply all of it to their cotton fields, which must soon raise the standard of the cotton crop very much.

We have used Gypsum freely this season with much success, on rested lands. The cotton in the same field with Gypsum, is fifty per cent. better than that without it. It is a cheap fertilizer, and seldom fails on rested lands. Thirty dollars manured sixty acres for us, and the effect is really marvelous. Pea crops are good. Potatoes are suffering from drought and must yield poorly unless we have rain soon.

Not knowing how I stand on your books, I enclose two dollars.

Yours, very respectfully,

BLACK OAK.

Pineville, Sept. 3d, 1858.

**REMARKS.**—Our respected friend "Black Oak," will accept our sincere thanks for the above communication. The true friends of the Farmer and Planter will now have a chance to show their hands in their endeavors to prolong its existence. It stands in a most critical and precarious position at present, and but a short month or two will reveal its fate. We hope seasons about Black Oak may continue propitious, as our friends are almost the only planters who have, at this time, a flattering prospect of crops, that we have heard from. Prospects generally are very unpromising.

**A Fight with a Dog---Deep Plowing and Horizontal Rows---Crops, &c.**

We much regret to hear from an old friend in Lexington District, that he had recently been attacked by, and had a desperate fight with a large and furious dog, which he conquered and killed, however, but which laid himself up some two weeks. On this and the other subjects above, he writes us:

I have yet felt right glad of my success, as I believed him to be a *sheep killer*, any how. I have as little love for dogs, especially sheep-killing ones, as you; and I am particularly vexed with them, since I lost all my lambs by them, during the past spring. The dogs have become so choice in their diet about here, that they seldom take an old sheep when a lamb is to be had. I have long since thought you were correct in your notions about the dog law, or rather necessity of a dog law. Something will have to be done, or we may give up the effort to raise sheep—the most profitable stock for us, were they allowed to go unharmed by the venomous curs of the country.

I am making a pretty fair crop, especially so for the seasons. I am more convinced than ever, as to the advantages of deep plowing and horizontal rows in a dry season, since I have seen the difference between this system and the old skinning process, with rows running up and down the hills, as if designed to conduct the water out of the fields, as though there was no use for it there. The reason that I have done better than most of my neighbors, is owing to my rows holding the water, while theirs conducts it away. I am making a good many converts about here to deep plowing and horizontal rows; but while my neighbors generally admit the advantages they see in it, they are yet slow in adopting the system; but I think the most of them will come to it after awhile.

Below here, where the seasons have been rather propitious, I hear of but little complaint of crops; but just above here, about Leesville, and from there towards Saluda, the drought has cut off both corn and cotton, on some farms, at least one-half. Between here and Edgefield C. H., the seasons have been favorable, and the crops of cotton and corn must be heavy, unless frost should come unusually early. I hear of but very little sickness, and the cow disease has disappeared altogether. I lost none but a fine breeder, from some cause unknown, on yesterday. The rest of my hogs are healthy. I have been rather particular in these seemingly small things, but I have supposed that the state of the crops, the condition of the health of stock, as well as that of "*the rest of mankind*," would be a matter of interest to you, which if gathered from reliable sources from all parts of the country, would enable you to make up a very interesting summary for the information of the public. I think, upon the whole, we have abundant cause for thankfulness to the great disposer of events, for the abundant reward He has bestowed upon our labors during the present year.

For the Farmer and Planter.

**"Now is the Winter of our Discontent made (A-dam) Glorious Summer."**

MR. EDITOR:—Not without feelings of reluctance have I prevailed upon myself to pen you this article, for I was of opinion that you (the subject matter being of no importance, and certainly of very little interest to the community) had grown quite lukewarm as to the publication of certain articles of at least one of your subscribers, and my opinion was based

upon those gentle strictures accompanying the article of "No Fisherman;"\* however, believing that no offence was intended, I have taken none. It is my intention to review as briefly as I can, the piece appearing in your last issue in relation to the "*tweddle de and tweddle dum*," no "penning between Mr. A. G. Sumner and myself. Mr. Sumner is mistaken in thinking that I had experienced "*fisherman's luck*," nor was I a "victim" to such an east wind as he so graphically describes in his *mother tongue*.— But I must confess that my *dunder was a little raised* at the unfair manner in which he handles my essay, and hence it was that I wrote as I did. How was it, Mr. Sumner, that your first article publishes to the world something (as extracted from my essay) which I defy you to find in it. I allude to the fact that you make me call the "*Grizzly*," "*Carolina Trout*."— Now, sir, I want you to look and see if it is used in the sense in which you herald it over the land. And yet you "*face the music*, confident that you have never misrepresented," &c., &c., and do not scruple to insinuate that I am not a "sensible writer." I will simply say that if you understood my essay (upon the point in question) as your "*Piscator*" piece makes you do, you are at liberty to call me a sensible writer or not. He next enters upon the *full history* of the "*Grizzly Salmoides*, and an enumeration of the finny tribe, which may farther astonish" me. I am indeed astonished; not at the enumeration, however, but because Mr. Sumner seems to think that no one has the privilege of consulting the *authorities* but himself. He has indeed given a full and explicit account of this fish, and I want to see some of our plain, practical farmers engaging in the *culture* of it, according to ideas drawn from this *full history*. My opinion is, that it will serve him about as much as a "*bob-tail does a dog in fly time*."— Mr. Sumner evidently does not regard this "pet pond" idea as ranking with *fin-tailed pigeons*, bantam chickens, &c. Mr. Editor, a few words to those who do believe in "pet ponds," and I shall have done. Do not expect to raise fish in any little mud hole which you shall construct and call a fish pond, but make a pond—the larger the better—supplied with good fresh water. It is vain to expect much from a pond less than  $\frac{1}{2}$  an acre in size. Be careful not to mix the "*Grizzly Salmoides*" with any varieties (excepting such as are intended for them to feed upon. I have seen a specimen of the "*Grizzly*," not exceeding  $1\frac{1}{2}$  inches in length, devour 61 silver fish in 24 hours (marvel not, Mr. S.) I now regard it as impracticable to attempt

to rear this fish to *perfection* in any other than a large pond. If, however, you construct a pond  $\frac{1}{2}$  an acre in size, &c., &c., you can count on at the least, three messes of good fish a week. I speak what I do know; and I *now* regard the red bellied perch as the more suitable for all purposes than any other.

T. W. WOODWARD.

Winnsboro', Sept. 7th.

\*Our friend is very much mistaken if he supposes that we are less disposed to publish his articles than those of any other contributor to our columns. We shall be pleased to hear from him at all times on any subject calculated to instruct or interest our readers; but contentions of "tweedle dee and tweedle dum," especially when couched in discourteous or disrespectful language, are certainly not interesting, nor are they desirable for our columns; and we must say to our friends that this rejoinder *shall* terminate the discussion in the Farmer and Planter.—Ed.

For the Farmer and Planter.

#### Cotton Lands of the Mississippi---Wealth of Bordering Country, &c.

MR. EDITOR:—Supposing there are those who might reflect on me for my advocacy of the swamp lands—the lands lying on either side of the Mississippi River—in the cotton region, and that many will rejoice they had not ventured into that country which has been so injured by the overflow, I beg your columns to show the immense increase in the wealth of the country on the east side—Mississippi; that there has been much people of my way of thinking. Allow me to say, the overflow will retard the settling of this country, but never prevent it. God never designed to give the garden spot of earth up to mosquitoes, alligators, woodchoppers, timber thieves, bear, deer, and other vermin, but designs it shall feed and clothe by the hundred thousand.

Countries.	Valuation of land. 1854.	Valuation of land. 1857.	Taxable negroes. 1854.	Taxable negroes. 1857.
Bolivar,	\$1,973,599.	\$6,465,833.	3,069.	5,847.
Coahoma,	785,055.	3,344,455.	1,926.	3,653.
DeSoto,	3,169,918.	4,710,083.	10,267.	11,725.
Isquahana,	2,047,259.	4,259,574.	2,638.	2,927.
Sunflower,	813,775.	2,406,962.	1,513.	1,993.
Tallahatchie,	1,036,123.	2,872,265.	2,953.	3,957.
Tunica,	934,876.	1,987,101.	12,163.	12,556.
Washington,	5,082,194.	7,416,162.	9,357.	11,135.
Yazoo.	3,255,474.	5,571,555.	11,438.	13,574.

Here are nine counties, more or less to be injured by the overflow of the Mississippi river, having a land property assessed in '57 at \$39.-034.005, and 67,417 negroes, worth here \$47.-691.900; we might say the whole is worth 90,000.000 in 1858. Is it to be supposed that such a capitol will not protect itself against the overflow? Never. In short of twelve months

that same property of those counties will be worth 100,000,000, and continue to increase in value as certain as the sun shines or water runs. I passed the river in May, June and August. The two first, when rain was every where—the last, prospects began to brighten only in spots. These 67,417 negroes may be divided thus: 38,708 children, 29,000 field hands, and 8,700 house servants, old and supernumeraries. These 30,000 can make, when land is open, for 10 years, allowing one to be an overflow, 270,000 bales, worth 10,800,000 dollars. Suppose an overflow every 5 years, the crop will not fall much under 250,000, or worth \$10,000,000. Where, sir, can you find such a country, with an overflow admitted every fifth year? Why, sir, the four years will give as good a crop as was made by the Jews of old.—I assure you I believe there are many planters who would make an average of 10 bales, including the overflow. I admit, with my means and at my age, though I am one of the strongest Baptists you ever saw, I would not dare to face the water. I never saw such heart-rending sights as in passing up and down the river in May or June, and desire to see such no more.

Yet if I was a young man of 25 to 35, with as many hands—25 to 35—cash to buy and feed one year, I would settle in the swamp. As to *Swamp*, it is one of the driest and prettiest countries I ever beheld—called *Swamp*, because subject to overflow, as is a strip near 50 miles wide. Many portions will compare, in regard to health, favorably with the sand hills or pine ridges in your State. Certainly I can show 20 and 30 children born per year, and not over 1 or 2 or 3 are lost, with proper attention. An increase of full 50 per cent. in 8 years, is no bad criterion of health—none bought. I advise no one to move. Why should I be deterred or debarred the privilege of showing a better country?

Yours, truly,

M. W. PHILIPS.

Edwards, Miss., Aug. 24, 1858.

For the Farmer and Planter.

#### A Remedy for the Bite of a Spider.

MAJ. SEABORN:—I see in your August number of the Farmer and Planter for 1858, a remedy for the bite of a rattle snake. Suffer me, through your paper, to publish a specific remedy for the bite of a spider, which I esteem by far the most annoying, having experienced them both myself. For the bite of a spider, let the patient take a tablespoon full of common camphorated spirits, and the pain will probably subside instantaneously, but if not, repeat the application a few times, and all will be right again in a few hours. I am not the only instance myself of a speedy cure in the aforesaid case by the above means, &c.

ALEX. MOORHEAD.

**Homestead Exemption Law.**

The value of a Homestead Exemption Law is well set forth by a distinguished Judge of Tennessee, as follows.—*Rural American*.

"Secure to each family whose labor may have acquired it, a little spot of fresh earth that it may call its own—that may be an asylum in times of adversity, from which the mother and children, old age and infancy, can still draw sustenance and obtain protection, though misfortune may rob them of all else, and they feel they still are free—still entitled to walk the green earth and breathe the free air of heaven, in defiance and potency of the power of accumulating wealth and domineering of the pretending and ambitious. The sacredness of that consecrated spot, will make them warriors in time of external strife. Those shocks of corn, said Xenophon, inspire those who raised them to defend them. The largest of them in a field is a prize exhibited in the middle of the State to crown the conqueror. Secure a home to every family whose labor may obtain one, against the weakness, vices or misfortunes of the father, and you rivet the affections of the child, in years of manhood, by a stronger tie than any consideration that could exist. He will remember where he gambled in his early youth, the stream upon whose banks he felt a mother's love, and the green spot within that little homestead where sleep the loved and lost."

REMARKS.—We are not much in favor of Exemption Laws, but are not quite sure that the exemption of Homestead, not to exceed a certain number of acres, would not be a good law in every State.—Such a law, we think, would have the effect of fixing the population more permanently, and consequently of improving the lands and increasing the agricultural products of the country, which are yearly decreasing under our present skinning system—evidently growing out of the fact of our having too much land under culture, and hence in framing a Homestead Exemption Law, we should fix the quantity of land subject to such exemption, to but a very few acres. A man may live and support a family on a much smaller area of land than would be believed by one man in a hundred, and instead of wearing out, as is the case with large farmer, his few acres will be improved and the product increased yearly. In England a man with one cow and a pig to fatten yearly, will, by the application of the manure made from his cow and pig, and a system of alternation of crops, so as to keep his ground always occupied, support a family embracing wife and several children, on a single acre of land. But yet, here, talk to a man about raising creditably a family on ten acres of land, even with everybody else's land for his hogs and cows to run on, and he would think you a crazy book-farmer. Point such a man to the statement below of the *nett profits* of a 40 acre farm, and not a word of it would be believed, but he would swear it was another book-farming lie.

**A PROFITABLE FORTY ACRE FARM.—To**

show that "much labor on little land" accomplishes, we present a brief statement drawn from the Hampshire Co. (Mass.) Ag. Society's Transactions, there given in the statement of Mr. Stebbins, of South Deerfield, on entering his farm for the premium of the Society.

The farm in question contains 41 acres, ten of it worn-out sandy land, when it came into his possession, over twenty years ago. But "resolved to have a better farm." To this sandy field (three acres the first year) he applied clay at the rate of fifty loads per acre, followed by twenty-five loads of manure and 200 lbs. of plaster. This was all plowed in together, the land planted to corn, and a fair crop was the result. After corn, oats were sown, and the ground seeded to clover. "By the use of clay and manure," he says, "I have made all my land as good as the best, and increased my pastures one hundred per cent., in quantity and quality of product.

As to deep plowing, he finds the best way to be to employ the subsoil plow. He turns under his manure four or five inches deep, and then subsoils the bottom of the furrow as deeply as possible. Corn is planted two years in succession, the better to mix soil and manure and to fit the land for grass, and he now sows barley instead of oats, as a more profitable crop.

The secret of this success lies in the fact that instead of one hundred loads of manure as formerly, he now makes three hundred and fifty loads, supplying his yards freely with absorbent earths, and using salt, lime and plaster, to considerable extent.

In 1854, the products of the 41 acre farm in usual farm crops, were worth a fraction under \$2,000, the net profits \$1,116.75. There were twenty-three acres in mowing; thirteen acres in corn and potatoes, three in barley, and two in wheat. The reader may here see that a large farm is not an essential requisite to profitable management.—*Country Gentleman*.

**Ladies' Department.**

From the Valley Farmer.

**House Cleaning.**

BY HETTIE MAYFIELD.

It is Washington Irving, I believe, who has associated inseparably, the charming month of May with house cleaning, by his graphic description of the bustling, busy, turmoil of a day the good city of Gotham has dedicated from time immemorial to the deity of change—that being the general season when renters

change homes. We do not know what are the necessities of the case in that latitude, but we have adopted the latest of our fine fall weather for our most general house cleaning; for of course Spring will bring with it some necessary changes in bedding, curtains, carpets, and the putting of hearths and grates in summer order, when fires have become useless. Our reasons for adopting Fall for this business are,—First, that there is more leisure, and the long calm days render it more agreeable. Secondly, there is much pleasure in enjoying the fruits of your labor as long as possible. The pleasure of seeing everything around you pure, is greatly prolonged by adopting fall for such portions of house cleaning as whitewashing, painting, &c. In spring, you scarcely get through the job, before the flies and dust are making visible marks; but in winter, these annoyances have been laid to rest, and your eyes may look with satisfaction on the works of your hands all winter, and spring will find all as fresh as if newly done. Meanwhile, all painting, especially that exposed to the weather, lasts much longer when done in the fall, the oil not drying so quickly is not absorbed by the wood, but combines with the paint, and thus preserves it longer.—We make an exception in favor of whitewashing in spring, i. e., out buildings and fences.—The driving rains of winter will wash it off, unless the very best preparation is used.

When you have house cleaning on hand and have not enough help to do it without interrupting the regular work of your family, it is well to make every arrangement so as to go it "with a will," as the sailors say. To save yourself from a waste of sympathy with the rueful feelings a man's visage always indicates on such times, persuade your husband off to the State Fair, detail your trustiest help to rule in the nursery, and, having baked and brewed as if a succession of Sabbaths were coming wherein no kettle could sing; arm and equip your household with brooms, brushes, &c., and let the early dawn and dewy eye see the work of purification going on. "The harder the storm the sooner it is over," is a good saying then. Where there is a super-roomary in the family, who is competent and reliable, let her take a room at a time, leisurely, and you will never know the ludicrous trouble masculine humor has so revelled in depicting. Be sure that you have everything on hand that you need, soap, sand, brushes, tacks, paint, oil, glue, &c. It makes woeful waste of time to wait for a "messenger to town" for half a day. When ready, have your pictures, mantle ornaments, in short all easily moved articles taken to a room to be cleaned, while the room itself is undergoing a similar process, covering over the articles necessarily left in the apartment.—Clean out and arrange the closets. The carpets having been removed, sweep off the floors perfectly; then with a long handled straw broom, sweep the ceilings clean and also the walls. If the ceiling is to be whitened proceed with a whitewash brush (and the mixture in receipts appended,) by laying on one coat, making the strokes all the time in one direction; when dry lay on the second coat, crossing the

first all the time. This repeat until the desired color is had. If any spots drop on the paper, when dry rub them off with a stiff brush. Next proceed to clean the windows, then the wood work generally, with brushes and cloths. If the paint is white, mix a teacup of whiting in a pail of warm water and wash with it. If the paint is colored, soap suds of hard soap, of water softened with sal soda will have to be used. After the windows have been washed and are dry, rub the glass bright with soft papers. Whiting spread on glass and rubbed off after drying with a clean cloth will make the glass clean. A mixture of whiskey and water will also clean glass. If the floors have no grease on them, they need but to be washed perfectly clean, giving particular attention to any parts the carpets do not cover. The room is now ready for the carpet again, provided there is no papering or painting to be done.—Papering may be, and is well put on by many persons for themselves, and plain painting is extremely simple work, such as the manager of no plain country house should require professional assistance for, if she has the training of her own servants, and can command their services. The heavy furniture left in the room should of course be put in perfectly neat order before the floor is washed, then carefully covered. Carpets should be well and straightly stretched and secured with tacks or hooks as some late patents suggest.

We take it for granted your grates were put in order the first thing, if they had been removed, and that if you use wood, your hearths had been put in perfect repair and painted in your spring cleaning. As the same general directions apply from cellar to garret, we proceed to a few practical hints about paint, paper, whitewash, cleaning, furniture, &c., &c.

(CONCLUDED IN NEXT NUMBER.)

**IMPORTANT TRUTHS FOR WIVES.**—In domestic happiness the wife's influence is much greater than her husband's; for the one, the first cause—mutual love and confidence—being granted, the whole comfort of the household depends upon it. It lies more immediately under her jurisdiction. By her management of small sums, her husband's respectability and credit are created or destroyed. No fortune can stand the constant leakages of extravagance and mismanagement; and more is spent in dimes than women would easily believe. The one great expense, whatever it may be, is turned over and carefully reflected on ere incurred; the income is prepared to meet it; but it is pennies imperceptibly sliding away which do the mischief; and this alone the wife can stop, for it does not come within a man's province. There is often an unsuspected trifle to be saved in every household. It is not in economy alone that the wife's attention is so necessary, but in those little niceties which mark a well-regulated house.—An untimely cruet stand, a missing key, a buttonless shirt, a clammy spoon, a soiled table cloth, a mustard pot, its old contents sticking hard and brown about it, are several nothings; but each one can raise an angry word or cause discomfort.